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009472871 **Image available**
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**Forming outwardly tapered orifice for print head of ink-jet printer -
involves generating light beams capable of ablating material used to form
cover plate and forming ink-carrying channel communicating orifice
through plate**

Patent Assignee: COMPAQ COMPUTER CORP (COPQ)

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Number of Countries: 005 Number of Patents: 008

Patent Family:

Patent No	Kind	Date	Applicat	No	Kind	Date	Main IPC	Week
US 5208980	A	19930511	US 91815396	A	19911231	B41J-003/04		199320 B
WO 9312937	A1	19930708	WO 92US10952	A	19921218	B41J-002/16		199328
AU 9334146	A	19930728	AU 9334146	A	19921218	B41J-002/16		199347
EP 619781	A1	19941019	WO 92US10952	A	19921218	B41J-002/16		199440
			EP 93902649	A	19921218			
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			JP 93511759	A	19921218			
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			EP 93902649	A	19921218			
DE 69205588	E	19951123	DE 605588	A	19921218	B41J-002/16		199601
			WO 92US10952	A	19921218			
			EP 93902649	A	19921218			
TW 283125	A	19960811	TW 92106869	A	19920829	B41J-002/015		199701

Priority Applications (No Type Date): US 91815396 A 19911231

Cited Patents: DE 2023739; EP 309146; EP 365195; EP 454152; EP 471157; WO 9100552

Patent Details:

Patent	Kind	Lan	Pg	Filing	Notes	Application	Patent
US 5208980	A		9				
WO 9312937	A1	E	21				
AU 9334146	A				Based on		WO 9312937
EP 619781	A1	E	2		Based on		WO 9312937
JP 6510958	W		1		Based on		WO 9312937
EP 619781	B1	E	11		Based on		WO 9312937
DE 69205588	E				Based on		EP 619781
					Based on		WO 9312937

Abstract (Basic): US 5208980 A

The method involves mounting a main body portion and a cover plate for an ink jet printhead together such that the cover plate covers an ink-carrying channel which axially extends through the main body portion.

Two light beams capable of ablating the material used to form the cover plate are generated. An ink-carrying channel communicating orifice extends through the cover plate and tapers outwardly from a front side of the cover plate to a back side of the cover plate. The channel is formed by directing the light beams at the front side of the cover plate at angles, respectively, whereby the light beams form the outwardly tapered orifice.

ADVANTAGE - Light beams forming outwardly tapered orifice reduce blocking or clogging of ink channels.